

Inter-Service Provider LNP Operations Flows - Narratives

Narratives: Following are the textual descriptions of the Inter-Service Provider LNP Operations Flows. These narratives provide a detailed description of the step-by-step flows.

Legend:

NLSP = New Local Service Provider

NNSP = New Network Service Provider

OLSP = Old Local Service Provider

ONSP = Old Network Service Provider

SV = Subscription Version

SP = Service Provider

FRS = Functional Requirements Specification

IIS = Interoperability Interface Specifications

LSR = Local Service Request

SPSR = Simple Port Service Request: This “short form” of the LSR, developed by the Ordering & Billing Forum (OBF), may be used by providers for Simple Port requests. Refer to FCC Order 07-188 for a definition of a Simple Port.

FOC = Firm Order Confirmation

ICP = Intercarrier Communication Process

WPR = Wireless Port Request

WPRR = Wireless Port Request Response

CSR = Customer Service Record

TN = Telephone Number

“via the SOA interface” = generic description for one of the following: the SOA CMIP association, LTI, or contacting NPAC personnel

NOTE:

These Narratives (Version 3.0) provide a detailed description of each process step within the attached LNP Operations Flows (Version 3.0).



NANC Flows v3.0
(revisions accepted).|

NOTE:

Pursuant to FCC Order 07-188, released on November 8, 2007, Local Number Portability (LNP) obligations are extended to interconnected Voice over Internet Protocol (VoIP) providers. The North American Numbering Council (NANC) identifies three classes of interconnected VoIP providers, defined as follows:

1. Class 1: A standalone interconnected VoIP provider that obtains numbering resources directly from the North American Numbering Plan Administrator (NANPA) and the Pooling Administrator (PA) and connects directly to the PSTN (i.e., not through a PSTN LEC partner’s end office switch). Class 1 standalone interconnected VoIP providers must follow the Main Flows for the LNP provisioning process, serving as the New Network Service Provider (NNSP) or Old Network Service Provider (ONSP), whichever is applicable.

2. Class 2: An interconnected VoIP provider that partners with a facilities-based Public Switched Telephone Network (PSTN) Local Exchange Carrier (LEC) to obtain numbering resources and connectivity to the PSTN via the LEC partner's end office switch. Although a Class 2 interconnected VoIP provider is not considered a reseller in the context of the FCC definition of a Simple Port (refer to FCC Order 07-188 for Simple Port definition), Class 2 interconnected VoIP providers must follow the Reseller Flows for the LNP provisioning process, serving as the New Local Service Provider (NLSP) or Old Local Service Provider (OLSP), whichever is applicable.
3. Class 3: A non-facilities-based reseller of interconnected VoIP services that utilizes the numbering resources and facilities of another interconnected VoIP provider (analogous to the "traditional" PSTN reseller). Although a Class 3 interconnected VoIP provider is not considered a reseller in the context of the FCC definition of a Simple Port (refer to FCC Order 07-188 for Simple Port definition), Class 3 interconnected VoIP providers must follow the Reseller Flows for the LNP provisioning process, serving as the New Local Service Provider (NLSP) or Old Local Service Provider (OLSP), whichever is applicable.

Provisioning With LRN

Main Flow, Figure 1

Flow Step	Description
1. START: End User Contact with NLSP	<ul style="list-style-type: none"> The process begins with an end-user requesting service from the NLSP. It is assumed that prior to entering the provisioning process the involved NPA/NXX was opened for porting (If code is not open, refer to Inter-Service Provider LNP Operations Flows – Code Opening Process, Figure 13.).
2. End User agrees to change to NLSP	<ul style="list-style-type: none"> End-user agrees to change to NLSP and requests retention of current telephone number (TN).
3. NLSP obtains end user authorization	<ul style="list-style-type: none"> NLSP obtains authority (Letter of Authorization - LOA) from end-user to act as the official agent on behalf of the end-user. The NLSP is responsible for demonstrating necessary authority.
4. (Optional) NLSP requests CSR from OLSP	<ul style="list-style-type: none"> As an optional step, the NLSP requests a Customer Service Record (CSR) from the OLSP. A service agreement between the NLSP and OLSP may or may not be required for CSR.
5. Are both NNSP and ONSP wireless?	<ul style="list-style-type: none"> If yes, go to Step 7. If no, go to Step 6.
6. LSR/FOC – Service Provider Communication	<ul style="list-style-type: none"> Inter-Service Provider LNP Operations Flows – Wireline LSR/FOC Process, Figure 2.
7. ICP – Service Provider Communication	<ul style="list-style-type: none"> Inter-Service Provider LNP Operations Flows – Wireless ICP Process, Figure 3.
8. Are NNSP and ONSP the same SP?	<ul style="list-style-type: none"> If yes, go to Step 10. If no, go to Step 9.
9. NNSP coordinates all porting activities	<ul style="list-style-type: none"> The NNSP must coordinate porting timeframes with the ONSP, and both provide appropriate messages to the NPAC. Upon completion of the LSR/FOC or ICP Process, and when ready to initiate service orders, go to Step 12.
10. Is NPAC processing required?	<ul style="list-style-type: none"> If yes, go to Step 11. If no, go to Step 20.
11. Perform intra-provider port or modify existing SV	<ul style="list-style-type: none"> NNSP enters intra-provider SV create data into the NPAC via the SOA interface for porting of end-user in accordance with the NANC FRS and the NANC IIS. Upon completion of intra-provider port, go to Step 20.

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Flow Step	Description
12. NNSP and ONSP create and process service orders	<ul style="list-style-type: none"> Upon completion of the LSR/FOC or ICP Process, the NNSP and ONSP create and process service orders through their internal service order systems, based on information provided in the LSR/FOC or WPR/WPRR.
13. Create – Service Provider Port Request	<ul style="list-style-type: none"> Inter-Service Provider LNP Operations Flows – Service Provider Create Process, Figure 4.
14. Was port request canceled?	<ul style="list-style-type: none"> The port was canceled by the ONSP, the NNSP, or automatically by an NPAC process. If yes, go to Step 17. If no, go to Step 15.
15. Did ONSP place the order in Conflict?	<ul style="list-style-type: none"> Check Concurrence Flag. If concurred, the ONSP agrees to the port. If NOT concurred, a conflict cause code as defined in the FRS, is designated. ONSP makes a concerted effort to contact NNSP prior to placing SV in conflict. <ul style="list-style-type: none"> For wireline SPs, the conflict request can be initiated up to the later of a.) the tunable time (Conflict Restriction Window, current value of 12:00) one business day before the Due Date or b.) the T2 Timer (Final Concurrence Window tunable parameter) has expired. For wireless SPs using short timers for this SV, the conflict request can be initiated up to the time the T2 Timer (Final Concurrence Window tunable parameter) has expired. If yes, go to Step 16. If no, go to Step 18.
16. NPAC logs request to place the order in conflict, including cause code	<ul style="list-style-type: none"> Go to Inter-Service Provider LNP Operations Flows - Conflict Flow for the Service Creation Provisioning Process - tie point B, Figure 8.
17. Notify Reseller – NPAC notifies NNSP and ONSP that port is canceled	<ul style="list-style-type: none"> Upon cancellation, NPAC logs this information, and changes the subscription status to <i>canceled</i>. Both SPs are notified of the change in the subscription status via the SOA interface. For the notification process, refer to Inter-Service Provider LNP Operations Flows – Reseller Notification, Figure 5. Both SPs take appropriate action related to internal work orders.

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Flow Step	Description
18. NNSP coordinates physical changes with ONSP	<ul style="list-style-type: none">• The NNSP has the option of requesting a coordinated order. This is also the re-entry point from the Inter-Service Provider LNP Operations Flows – Conflict Flow for the Service Creation Provisioning Process, tie point BB, Figure 8.• If coordination is requested on the LSR, an indication of Yes or No for the application of a 10-digit trigger is required. If no coordination indication is given, then by default, the 10-digit trigger is applied as defined by inter-company agreements between the involved service providers. If the NNSP requests a coordinated order and specifies ‘no’ on the application of the 10-digit trigger, the ONSP uses the 10-digit trigger at its discretion.
19. Is the unconditional 10 digit trigger being used?	<ul style="list-style-type: none">• The unconditional 10-digit trigger is an option assigned to a number on a donor switch during the transition period when the number is physically moved from donor switch to recipient switch. During this period it is possible for the TN to reside in both donor and recipient switches at the same time.• The unconditional 10-digit trigger may be applied by the NNSP. A 10-digit trigger is applied by the ONSP no later than the day prior to the due date.• If yes, go to Inter-Service Provider LNP Operations Flows - Provisioning with Unconditional 10-Digit Trigger - tie point AA, Figure 7.• If no, go to Inter-Service Provider LNP Operations Flows - Provisioning without Unconditional 10-digit Trigger - tie point A, Figure 6.
20. End	<ul style="list-style-type: none">• End of the Inter-Service Provider LNP Operations Flows – Main Flow.• This is also the re-entry point from various flows, tie point Z.

Wireline LSR/FOC Service Provider Communication

Flow LSR/FOC, Figure 2

Flow Step	Description
1. Is end user porting all TNs?	<ul style="list-style-type: none">• This is the entry point from the Inter-Service Provider LNP Operations Flows – Main Flow, LSR/FOC Process, Step 6, Figure 1.• The NLSP determines if customer is porting all TN(s).• If yes, go to Step 3.• If no, go to Step 2.
2. NLSP notes “Not all TNs are being ported” in the remarks field of LSR	<ul style="list-style-type: none">• The NLSP makes a note in the remarks section of the LSR to identify that the end-user is not porting all TN(s). This can affect the due date interval due to account rearrangements necessary prior to service order issuance.
3. Is NLSP a Reseller?	<ul style="list-style-type: none">• If yes, go to Step 4.• If no, go to Step 5.
4. NLSP sends LSR or LSR information to NNSP for resale service	<ul style="list-style-type: none">• NLSP (Reseller) sends an LSR or LSR Information to the NNSP fulfilling all requirements of any service agreement between the involved service providers. The LSR process is defined by the Ordering and Billing Forum (OBF) and the electronic interface by the Telecommunications Industry Forum (TCIF).
5. NNSP sends LSR/SPSR to ONSP	<ul style="list-style-type: none">• The NNSP notifies the ONSP of the port using the LSR/SPSR and sends the information via an electronic gateway, FAX, or manual means. The LSR/SPSR process is defined by the Ordering and Billing Forum (OBF) and the electronic interface by the Telecommunications Industry Forum (TCIF).• Pursuant to FCC Order 07-188, released on November 8, 2007, LNP validation on Simple Port requests can only be based on the following four data fields on an LSR/SPSR: (1) 10-digit telephone number; (2) customer account number; (3) 5-digit zip code; and (4) pass code (if applicable). The FCC defined a Simple Port as those ports that: (1) do not involve unbundled network elements; (2) involve an account only for a single line; (3) do not include complex switch translations (e.g., Centrex, ISDN, AIN services, remote call forwarding, or multiple services on the loop); and (4) do not include a reseller.
6. Is OLSP a Reseller or is a Type 1 wireless number involved?	<ul style="list-style-type: none">• In a wireline flow scenario, these are numbers that use a Type 1 wireless interconnection.• If yes, go to Step 7.• If no, go to Step 9.

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Flow Step	Description
<p>7. Notify Reseller – (conditional) ONSP sends LSR/SPSR, LSR/SPSR information, or Loss Notification to OLSP</p>	<ul style="list-style-type: none"> • (conditional, based on any service agreement between the involved service providers) – ONSP sends an LSR/SPSR, LSR/SPSR Information, or Loss Notification to the OLSP (Reseller or if a Type 1 number is involved) fulfilling all requirements. The LSR/SPSR process is defined by the Ordering and Billing Forum (OBF) and the electronic interface by the Telecommunications Industry Forum (TCIF). • (conditional, , based on any service agreement between the involved service providers) – A Loss Alert/Notification may be sent to the OLSP. The specific timing will be based on the requirements of any service agreement between the involved service providers. • Communication between the ONSP and the OLSP with regard to the port should not delay the validation or processing of the port request.
<p>8. (conditional) OLSP sends FOC or FOC information to ONSP</p>	<ul style="list-style-type: none"> • (conditional, based on any service agreement between the involved service providers) – The OLSP notifies the ONSP of the porting using the FOC and sends the information via an electronic gateway, FAX, or other means. The LSR/FOC process is defined by the Ordering and Billing Forum (OBF) and the electronic interface by the Telecommunications Industry Forum (TCIF). The information required on the FOC may vary based on the carriers involved. • Communication between the ONSP and the OLSP with regard to the port should not delay the validation or processing of the port request.
<p>9. ONSP sends FOC to NNSP</p>	<ul style="list-style-type: none"> • ONSP sends the firm order confirmation (FOC, local response) to the NNSP for the porting LSR/SPSR. • For wireline to wireline service providers, and between wireline and wireless service providers, the minimum expectation is that the FOC is returned within 24 hours excluding weekends. It is the responsibility of the ONSP to contact the NNSP if the ONSP is unable to meet the 24 hour expectation for transmitting the FOC. If the FOC is not received by the NNSP within 24 hours, then the NNSP contacts the ONSP. • The due date of the first TN ported in an NPA-NXX is no earlier than five (5) business days after FOC receipt date. Any subsequent port in that NPA NXX will have a due date no earlier than three (3) business days after FOC receipt. It is assumed that the porting interval is not in addition to intervals for other requested services (e.g., unbundled loops) related to the porting request. The interval becomes the longest single interval required for the services requested. • The LSR/FOC process is defined by the Ordering and Billing Forum (OBF) and the electronic interface by the Telecommunications Industry Forum (TCIF). The information required on the FOC may vary based on the carriers involved.
<p>10. Is NLSP a Reseller?</p>	<ul style="list-style-type: none"> • If yes, go to Step 11. • If no, go to Step 12.

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Flow Step	Description
11. NNSP forwards FOC or FOC Information to NLSP	<ul style="list-style-type: none">• NNSP forwards FOC or FOC Information to NLSP fulfilling all requirements of any service agreement between the involved service providers. The LSR/FOC process is defined by the Ordering and Billing Forum (OBF) and the electronic interface by the Telecommunications Industry Forum (TCIF). The information required on the FOC may vary based on the carriers involved.
12. Return to Figure 1	<ul style="list-style-type: none">• Return to main flow, LSR/FOC Process, Step 6.

Wireless ICP Service Provider Communication

Flow ICP (Intercarrier Communication Process), Figure 3

Flow Step	Description
1. Is NLSP a Reseller?	<ul style="list-style-type: none">• This is the entry point from the Inter-Service Provider LNP Operations Flows – Main Flow, ICP Process, Step 7.• The NLSP determines if customer is porting all TN(s).• If yes, go to Step 2.• If no, go to Step 3.
2. NLSP sends WPR or WPR information to NNSP for resale service	<ul style="list-style-type: none">• NLSP (Reseller) sends a WPR (Wireless Port Request) or WPR information to the NNSP (may vary slightly depending on provider agreement between the involved service providers).• For wireless to wireless service providers the WPR/WPRR (Wireless Port Request/Wireless Port Request Response) initial response time frame is 30 minutes.• The due date of the first TN ported in an NPA-NXX is no earlier than 5 business days after a confirming WPRR receipt date.• The due date for a TN ported in an NPA-NXX which has TNs already ported is no earlier than 2 business hours after a confirming WPRR receipt date/time or as currently determined by NANC.
3. NNSP sends WPR to ONSP	<ul style="list-style-type: none">• The NNSP notifies the ONSP of the port request using the WPR and sends the information via CORBA or FAX.• ICP response interval, currently set to 30 minutes, begins from acknowledgment being received by NNSP from ONSP, and not at the time the WPR is sent from the NNSP to the ONSP.• Pursuant to FCC Order 07-188, released on November 8, 2007, LNP validation on Simple Port requests can only be based on the following four data fields on a WPR: (1) 10-digit telephone number; (2) customer account number; (3) 5-digit zip code; and (4) pass code (if applicable). The FCC defined a Simple Port as those ports that: (1) do not involve unbundled network elements; (2) involve an account only for a single line; (3) do not include complex switch translations (e.g., Centrex, ISDN, AIN services, remote call forwarding, or multiple services on the loop); and (4) do not include a reseller.
4. Is a Type 1 wireless number involved?	<ul style="list-style-type: none">• If yes, go to Step 5• If no, go to Step 8.
5. ONSP sends WPRR rejection to NNSP	<ul style="list-style-type: none">• ONSP identifies the number as using a Type 1 wireless interconnection, and returns a WPRR to the NNSP rejecting the request for this Type 1 number.

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Flow Step	Description
6. Change code owner to Old Wireline SP in NPAC and possibly LERG, as necessary	<ul style="list-style-type: none"> The code holder of the NPA-NXX is not the Old Wireline SP. To maintain proper NPA-NXX ownership reference, the NPAC data must reflect the Old Wireline SP as the code holder, therefore update as necessary. This allows the NNSP to determine the recipient ONSP of the resultant LSR (Figure 2, Wireline LSR/FOC Process). An NNSP may alternatively use the LERG for NPA-NXX ownership reference to determine the recipient ONSP of the resultant LSR (Figure 2, Wireline LSR/FOC Process). Therefore, in the case of a shared code, the LERG data should also be updated to reflect the Old Wireline SP as the code holder. NOTE: In the case of a dedicated code, the LERG data should not be changed as this would violate LERG assignment guidelines. <p>NOTE: Once the migration of Type 1 interconnected telephone numbers is complete, the number is no longer a Type 1 number (there is no such thing as a “migrated Type 1 number”), but is now considered Type 2.</p>
7. Re-start process, return to Figure 1	<ul style="list-style-type: none"> The NNSP reference to the recipient of the WPR has been changed to a wireline SP, and must now follow the LSR/FOC process. Re-start the intercarrier communication process by returning to main flow Figure 1, Steps 5/6, since this is no longer a “both are wireless carriers” scenario.
8. Is OLSP a Reseller?	<ul style="list-style-type: none"> If yes, go to Step 9. If no, go to Step 11.
9. ONSP sends WPR or WPR information to OLSP	<ul style="list-style-type: none"> The ONSP notifies the OLSP of the port request using the WPR or WPR information.
10. OLSP sends WPRR or WPRR information to ONSP	<ul style="list-style-type: none"> The OLSP sends the ONSP the WPRR or WPRR information.
11. ONSP sends WPRR to NNSP	<ul style="list-style-type: none"> ONSP sends the WPRR to the NNSP. IC terminates upon receipt of WPRR by NNSP.
12. Is NLSP a Reseller?	<ul style="list-style-type: none"> If yes, go to Step 13. If no, go to Step 14.
13. NNSP forwards WPRR or WPRR information to NLSP	<ul style="list-style-type: none"> The NNSP sends the WPRR or WPRR information to the NLSP.
14. Is WPRR a Delay?	<ul style="list-style-type: none"> If yes, go to Step 15. If no, go to Step 16.
15. Is OLSP a Reseller?	<ul style="list-style-type: none"> If yes, go to Step 10. If no, go to Step 11.

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Flow Step	Description
16. Is WPRR confirmed?	<ul style="list-style-type: none">• If yes, go to Step 18.• If no, go to Step 17 – WPRR must be a Resolution Required.
17. WPRR is a resolution response	<ul style="list-style-type: none">• Return to Step 1.
18. Return to Figure 1	<ul style="list-style-type: none">• Return to main flow Figure 1, ICP Process, Step 7.

Service Provider Port Request

Flow Create, Figure 4

Flow Step	Description
1. NNSP and (optionally) ONSP notify NPAC with Create message	<ul style="list-style-type: none"> Due date of the create message is the due date on the FOC, where wireline due date equals date and wireless due date equals date and time. For porting between wireless and wireline, the wireline due date applies. Any change of due date to the NPAC is usually the result of a change in the FOC due date. SPs enter SV data into the NPAC via the SOA interface for porting of end-user in accordance with the NANC FRS and the NANC IIS.
2. Is Create message valid?	<ul style="list-style-type: none"> NPAC validates data to ensure value formats and consistency as defined in the FRS. This is not a comparison between NNSP and ONSP messages. If yes, go to Step 4. If this is the first valid create message, the T1 Timer (Initial Concurrence Window tunable parameter) is started. SV Create notifications are sent to both the ONSP and NNSP. If no, go to Step 3.
3. NPAC notifies appropriate Service Provider that create message is invalid	<ul style="list-style-type: none"> If the data is not valid, the NPAC sends error notification to the SP for correction. The SP, upon notification from the NPAC, corrects the data and resubmits to the NPAC. Re-enter at Step 1.
4. NPAC starts T1 timer	<ul style="list-style-type: none"> Upon receipt of the first valid create message, the NPAC starts the T1 Timer (Initial Concurrence Window tunable parameter). The value for the T1 Timer is configurable (one of two values) for SPs. SPs will use either long or short timers. The current value for the long timer (typically any wireline involved porting) is nine (9) business hours. The current value for the short timer (typically wireless-to-wireless porting) is one (1) business hour.
5. T1 expired?	<ul style="list-style-type: none"> NPAC timers include business hours only, except where otherwise specified. Short business hours are defined as 7a-7p CT (business day start at 13:00/12:00 GMT, duration of 12 hours). Long business hours are planned for 9a-9p in the predominant time zone for each NPAC region (business day start – NE/MA/SE 14:00/13:00 GMT, MW/SW/Canadian 15:00/14:00 GMT, WE 16:00/15:00 GMT, WC 17:00/16:00 GMT, duration of 12 hours). Short Business Days are currently defined as Monday through Friday, except holidays, and Long Business Days are currently defined as Sunday through Saturday (seven days a week), except holidays. Holidays and business hours are defined for each NPAC Region. If yes, go to Step 10. If no, go to Step 6.

Inter-Service Provider LNP Operations Flows - Narratives

Flow Step	Description
6. Received Second Create?	<ul style="list-style-type: none"> • If yes, go to Step 7. • If no, return to Step 5.
7. Is Create message valid?	<ul style="list-style-type: none"> • If yes, go to Step 8. • If no, go to Step 9.
8. Return to Figure 1	<ul style="list-style-type: none"> • The porting process continues. • Return to main flow Figure 1, Create Process, Step 13.
9. NPAC notifies appropriate Service Provider that Create message is invalid	<ul style="list-style-type: none"> • The NPAC informs the SP of an invalid create. If necessary, the notified Service Provider coordinates the correction.
10. NPAC notifies NNSP and ONSP that T1 has expired, and then starts T2 Timer	<ul style="list-style-type: none"> • The NPAC informs the NNSP and ONSP of the expiration of the T1 Timer. • Upon expiration, the NPAC starts the T2 Timer (Final Concurrence Window tunable parameter).
11. T2 Expired?	<ul style="list-style-type: none"> • The NPAC provides a T2 Timer (Final Concurrence Window tunable parameter) that is defined as the number of hours after the expiration of the T1 Timer. • The value for the T2 Timer (Final Concurrence Window tunable parameter) is configurable (one of two values) for Service Providers. Service Providers will use either long or short timers. The current value for the long timer is nine (9) hours. The current value for the short timer is one (1) hour. • NPAC timers include business hours only, except where otherwise specified. Short business hours are defined as 7a-7p CT (business day start at 13:00/12:00 GMT, duration of 12 hours). Long business hours are planned for 9a-9p in the predominant time zone for each NPAC region (business day start – NE/MA/SE 14:00/13:00 GMT, MW/SW/Canadian 15:00/14:00 GMT, WE 16:00/15:00 GMT, WC 17:00/16:00 GMT, duration of 12 hours). Short Business Days are currently defined as Monday through Friday, except holidays, and Long Business Days are currently defined as Sunday through Saturday (seven days a week), except holidays. Holidays and business hours are defined for each NPAC Region. • If yes, go to Step 15. • If no, go to Step 12.
12. Receives Second Create?	<ul style="list-style-type: none"> • If yes, go to Step 13. • If no, return to Step 11.

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Flow Step	Description
13. Is Create message valid?	<ul style="list-style-type: none">• If yes, go to Step 19.• If no, go to Step 14.
14. NPAC notifies appropriate service provider that Create message is invalid	<ul style="list-style-type: none">• The NPAC notifies the service provider that errors were encountered during the validation process.• Return to Step 11.
15. Did NNSP send Create?	<ul style="list-style-type: none">• If yes, go to Step 20.• If no, go to Step 16.
16. NPAC notifies NNSP and ONSP that T2 has expired	<ul style="list-style-type: none">• The NPAC notifies both NNSP and ONSP of T2 expiration.
17. Has cancel window for pending SVs expired?	<ul style="list-style-type: none">• If yes, go to Step 18.• If no, return to Step 12.
18. Notify Reseller NPAC notifies NNSP and ONSP that port is canceled	<ul style="list-style-type: none">• The SV is canceled by NPAC by tunable parameter (30 days). Both SPs take appropriate action related to internal work orders.• For the notification process, refer to Inter-Service Provider LNP Operations Flows – Reseller Notification, Figure 5.
19. Return to Figure 1	<ul style="list-style-type: none">• Return to main flow Figure 1, Create Process, Step 13.
20. NPAC notifies ONSP that porting proceeds under the control of the NNSP	<ul style="list-style-type: none">• A notification message is sent to the ONSP noting that the porting is proceeding in the absence of any message from the ONSP.

Reseller Notification Process

Reseller Notification Flow, Figure 5

Flow Step	Description
1. Is OLSP a Reseller?	<ul style="list-style-type: none">• If yes, go to Step 2.• If no, go to Step 4.
2. Does OLSP need message?	<ul style="list-style-type: none">• If yes, go to Step 3.• If no, go to Step 4.
3. ONSP sends or provides information and/or message to OLSP	<ul style="list-style-type: none">• ONSP (Network Provider) sends or provides information and/or message to the OLSP (Reseller) fulfilling all requirements of any service agreement between the involved service providers.
4. Is NLSP a Reseller?	<ul style="list-style-type: none">• If yes, go to Step 5.• If no, go to Step 7.
5. Does NLSP need message?	<ul style="list-style-type: none">• If yes, go to Step 6.• If no, go to Step 7.
6. NNSP sends or provides information and/or message to NLSP	<ul style="list-style-type: none">• NNSP (Network Provider) sends or provides information and/or message to the NLSP (Reseller) fulfilling all requirements of any service agreement between the involved service providers.
7. Return	<ul style="list-style-type: none">• Return to previous flow.

Provisioning Without Unconditional 10-Digit Trigger

Flow A, Figure 6

Flow Step	Description
NOTE: Steps 1 and 2 are worked concurrently.	
1. NNSP activates port (locally)	<ul style="list-style-type: none"> This is the entry point from the Inter-Service Provider LNP Operations Flows – Main Flow, tie point A, Figure 1. The Wireline NNSP activates its own Central Office translations. As an optional step, the Wireless NNSP activates its own switch/HLR configuration including assignment of Mobile Station Identifier (MSID).
NOTE: Steps 2 and 3 may be worked concurrently.	
2. NNSP and ONSP make physical changes (where necessary)	<ul style="list-style-type: none"> Wireline physical changes may or may not be coordinated. Coordinated physical changes are based on inter-connection agreements between the involved service providers. Mobile Station (handset) changes are completed. The NNSP is now providing dial tone to ported end user.
3. NNSP notifies NPAC to activate the port	<ul style="list-style-type: none"> The NNSP sends an activate message to the NPAC via the SOA interface. No NPAC SV may activate before the SV due date/time. If not done in step 1 above, the Wireless NNSP activates its own switch/HLR configuration including assignment of Mobile Station Identifier (MSID).
NOTE: Steps 4, 5, 6, and 7 may be concurrent, but at a minimum should be completed ASAP.	
4. NPAC downloads (real time) to all service providers	<ul style="list-style-type: none"> The NPAC broadcasts new SV data to all SP LSMSs in the serving area in accordance with the NANC FRS and NANC IIS. The Service Control Point (SCP) Applications and GTT Function for Number Portability requirements are defined by T1S1.6.
5. NPAC records date and time in history file	<ul style="list-style-type: none"> The NPAC records the current date and time as the Activation Date and Time stamp, at the start of the broadcast. The Activation Complete Timestamp is based on the first LSMS that successfully acknowledged receipt of new SV.
6. Wireline ONSP removes translations in Central Office. Wireless ONSP removes subscriber from switch/HLR	<ul style="list-style-type: none"> The Wireline ONSP initiates the removal of translation either at designated Due Date and Time, or if the order was designated as coordinated, upon receipt of a call from the NNSP. The Wireless ONSP initiates the removal of the subscriber record from the switch/HLR after the activation of the port. As an optional step, if the OLSP is a Reseller, the ONSP should send a Loss Notification to the OLSP (indicator to stop billing).

Inter-Service Provider LNP Operations Flows - Narratives

Flow Step	Description
7. NPAC logs failures and non-responses and notifies the NNSP and ONSP	<ul style="list-style-type: none">• The NPAC resends the activation to an LSMS that did not acknowledge receipt of the request, based on the retry tunable and retry interval. The number of NPAC SMS attempts to send is a tunable parameter for which the current setting is one (1) attempt, in which case no retry attempts are performed. Once this cycle is completed, NPAC personnel, when requested, investigate possible problems. In addition, the NPAC sends a notification via the SOA interface to both NNSP and ONSP with a list of LSMSs that failed activation.
8. All service providers update routing databases (real time download)	<ul style="list-style-type: none">• This is an internal process and is performed in accordance with the Service Control Point (SCP) Applications and GTT Function for Number Portability requirements as defined by T1S1.6 (within 15 minutes).
9. NNSP may verify completion	<ul style="list-style-type: none">• The NNSP may make test calls to verify that calls to ported numbers complete as expected.
Z. End	<ul style="list-style-type: none">• Return to main flow, tie point Z, Figure 1.

Provisioning With Unconditional 10-Digit Trigger

Flow AA, Figure 7

Flow Step	Description
1. ONSP activates unconditional 10 digit trigger in the central office	<ul style="list-style-type: none"> This is the entry point from the Inter-Service Provider LNP Operations Flows – Main Flow, tie point AA, Figure 1. The actual time for trigger activation is defined on a regional basis. The unconditional 10-digit trigger may optionally be applied by the NNSP.
NOTE: Steps 2 and 3 may be worked concurrently.	
2. NNSP activates central office translations	<ul style="list-style-type: none"> The NNSP activates its own Central Office translations.
3. NNSP and ONSP make physical changes (where necessary)	<ul style="list-style-type: none"> Any physical work or changes are made by either NNSP or ONSP, as necessary. Physical changes may or may not be coordinated. Coordinated physical changes are based on inter-connection agreements between the involved service providers. The NNSP is now providing dial-tone to ported in user
4. NNSP notifies NPAC to activate the port	<ul style="list-style-type: none"> The NNSP sends an activate message via the SOA interface to the NPAC. No NPAC SV may activate before the SV due date/time.
NOTE: Steps 5, 6, and 7 may be concurrent, but at a minimum should be completed ASAP.	
5. NPAC downloads (real time) to all service providers	<ul style="list-style-type: none"> The NPAC broadcasts new SV data to all SPs in the serving area in accordance with the NANC FRS and NANC IIS. The Service Control Point (SCP) Applications and GTT Function for Number Portability requirements are defined by T1S1.6.
6. NPAC records date and time in history file	<ul style="list-style-type: none"> The NPAC records the current date and time as the Activation Date and Time stamp, at the start of the broadcast. The Activation Complete Timestamp is based on the first LSMS that successfully acknowledged receipt of new subscription version.
7. NPAC logs failures and non-responses and notifies the NNSP and ONSP	<ul style="list-style-type: none"> The NPAC resends the activation to a Local SMS that did not acknowledge receipt of the request, based on the retry tunable and retry interval. The number of NPAC attempts to send is a tunable parameter for which the current setting is one (1) attempt, in which case no retry attempts are performed. Once this cycle is completed NPAC personnel, when requested, investigate possible problems. In addition, the NPAC sends a notification via the SOA interface to both the NNSP and ONSP with a list of LSMSs that failed activation.
8. All service providers update routing data (real time download)	<ul style="list-style-type: none"> This is an internal process and is performed in accordance with the Service Control Point (SCP) Applications and GTT Function for Number Portability requirements as defined by T1S1.6 (within 15 minutes).

Inter-Service Provider LNP Operations Flows - Narratives

Flow Step	Description
9. ONSP removes appropriate translations	<ul style="list-style-type: none">• After update of its databases the ONSP removes translations associated with the ported TN(s). The removal of these translations (1.) will not be done until the old Service Provider has evidence that the port has occurred, or (2.) will not be scheduled earlier than 11:59 PM one day after the due date, or (3.) will be scheduled for 11:59 PM on the due date, but can be changed by an LSR supplement received no later than 9:00 PM local time on the due date. This LSR supplement must be submitted in accordance with local practices governing LSR exchange, including such communications by telephone, fax, etc.• As an optional step, if the OLSP is a Reseller, the ONSP should send a Loss Notification to the OLSP (indicator to stop billing).
10. NNSP may verify completion	<ul style="list-style-type: none">• The NNSP may make test calls to verify that calls to ported numbers complete as expected.
Z. End	<ul style="list-style-type: none">• Return to main flow, tie point Z, Figure 1.

Conflict Flow for the Service Creation Provisioning Process

Flow B, Figure 8

Flow Step	Description
1. Is conflict restricted?	<ul style="list-style-type: none"> The conflict flow is entered through the Provisioning process flow (Main Flow) through tie point (B), Figure 1, when the ONSP enters a concurrence flag of “No”, and designates a conflict cause code. Conflict is restricted (i.e., SV may not be placed into conflict by the ONSP) if one of the following: <ul style="list-style-type: none"> The ONSP previously placed the subscription into conflict, or The ONSP never sent a create message for this subscription, or The request was initiated too late: <ul style="list-style-type: none"> For wireline SPs the request was initiated after the tunable time (Conflict Restriction Window, current value of 12:00) one business day before the Due Date and T2 Timer (Final Concurrence Window tunable parameter) has expired. For wireless SPs using short timers for this SV, the request was initiated after the T2 Timer (Final Concurrence Window tunable parameter) has expired. If yes, go to Step 2. If no, go to Step 3.
2. NPAC rejects the conflict request	<ul style="list-style-type: none"> NPAC notifies SP of rejection. The porting process resumes as normal, proceeding to the Provisioning process flow (Main Flow) at tie point BB, Figure 1.
3. NPAC changes the subscription status to conflict and notifies NNSP and ONSP	<ul style="list-style-type: none"> For the notification process, refer to Inter-Service Provider LNP Operations Flows – Reseller Notification, Figure 5. Both SPs take appropriate action related to internal work orders. SVs may be modified while in the conflict state (e.g., due date), by either the NNSP or ONSP.
4. NNSP contacts ONSP to resolve conflict. If no agreement is reached, begin normal escalation	<ul style="list-style-type: none"> The escalation process is defined in the inter-company agreements between the involved service providers.
5. Was conflict resolved within conflict expiration window?	<ul style="list-style-type: none"> From the time an SV is placed in conflict, there is a tunable window (Conflict Expiration Window, current value of 30-calendar day limit after the due date) after which it is removed from the NPAC database. If it is resolved within the tunable window, go to Step 7; if not, the subscription request will “time out” and go to Step 6.

Inter-Service Provider LNP Operations Flows - Narratives

Flow Step	Description
6. NPAC initiates cancellation and notifies NNSP and ONSP	<ul style="list-style-type: none"> For the notification process, refer to Inter-Service Provider LNP Operations Flows – Reseller Notification, Figure 5. Both SPs take appropriate action related to internal work orders.
7. Was port request canceled to resolve conflict?	<ul style="list-style-type: none"> Conflict resolution initiates one of two actions: 1) cancellation of the subscription, or 2) resumption of the service creation provisioning process. If the conflict is resolved by cancellation of the subscription, then proceed to the Cancellation Flows for Provisioning Process through tie point C, Figure 9. If the conflict is otherwise resolved, go to Step 8.
8. Was resolution message from ONSP?	<ul style="list-style-type: none"> If yes, go to Step 9. If no, go to Step 10.
9. NPAC notifies NNSP and ONSP of ‘conflict off’ via SOA	<ul style="list-style-type: none"> For the notification process, refer to Inter-Service Provider LNP Operations Flows – Reseller Notification, Figure 5. NPAC notifies both SPs of the change in SV status. The porting process resumes as normal, proceeding to the Provisioning process flow (Main Flow) at tie point BB, Figure 1.
10. Did NNSP send resolution message during the restriction window?	<ul style="list-style-type: none"> If conflict was resolved within tunable business hours (current values of six hours for wireline [Long Conflict Resolution New Service Provider Restriction], and six hours for wireless [Short Conflict Resolution New Service Provider Restriction]), only the ONSP may notify NPAC of “conflict off”. If conflict was resolved after tunable hours, either the NNSP or ONSP may notify NPAC of “conflict off”. In order for the porting process to continue at least one SP must remove the SV from conflict. If yes, go to Step 11. If no, go to Step 9.
11. NPAC rejects the conflict resolution request from NNSP	<ul style="list-style-type: none"> NPAC sends an error to the NNSP indicating conflict resolution is not valid at this point in time.
12. Was the Conflict Cause Code 50 or 51>	<ul style="list-style-type: none"> If yes, go to Step 11. If no, go to Step 9.
Z. End	<ul style="list-style-type: none"> Return to main flow, tie point Z, Figure 1.

Cancellation Flows for Provisioning Process

Cancel Flow, Figure 9

Introduction

A service order and/or subscription may be canceled through the following processes:

- The end-user contacts the NLSP or OLSP and requests cancellation of their porting request.
- Conflict Flow for the Service Creation Provisioning Process – Flow B, Figure 8: As a result of the Conflict Resolution process (at tie-point C) the NLSP and OLSP agree to cancel the SV and applicable service orders.

<u>Flow Step</u>	<u>Description</u>
1. End-user request to cancel	<ul style="list-style-type: none">• The Cancellation Process may begin with an end-user requesting cancellation of their pending port. The Cancellation process flow applies only to that period of time between SV creation, and either activation or cancellation of the porting request. If activation completed and the end-user wishes to revert back to the former SP, it is accomplished via the Provisioning Process.
2. Did end-user contact NLSP?	<ul style="list-style-type: none">• The end-user contacts either the NLSP or OLSP to cancel the porting request. Only the NLSP or OLSP can initiate this transaction, not another SP.• The contacted SP gathers information necessary for sending the supplemental request to the other SP noting cancellation, and for sending the cancellation request to NPAC.• If yes, go to Step 3.• If no, go to Step 7.
3. Is NLSP a Reseller?	<ul style="list-style-type: none">• If yes, go to Step 4.• If no, go to Step 6.
4. NLSP sends cancel request to NNSP	<ul style="list-style-type: none">• The NLSP notifies the NNSP, via their inter-company interface, indicating that the porting request is to be canceled.
5. NNSP sends SUPP to ONSP noting cancellation as soon as possible and prior to activation	<ul style="list-style-type: none">• The NNSP fills out and sends the supplemental request form to the ONSP via their inter-company interface, indicating cancellation of the porting request.
6. NNSP sends cancel request to the NPAC	<ul style="list-style-type: none">• The NNSP notifies the NPAC, via the SOA interface, indicating the porting request is to be canceled.

Inter-Service Provider LNP Operations Flows - Narratives

Flow Step	Description
7. OLSP obtains end-user authorization	<ul style="list-style-type: none"> The OLSP obtains actual authority from the end-user to act as the official agent on behalf of the end-user to cancel the porting request. The OLSP is responsible for demonstrating such authority as necessary.
8. Is OLSP a Reseller?	<ul style="list-style-type: none"> If yes, go to Step 9. If no, go to Step 10.
9. OLSP sends cancel request to ONSP	<ul style="list-style-type: none"> The OLSP notifies the ONSP, via their inter-company interface, indicating that the porting request is to be canceled.
10. ONSP sends cancel request to NPAC	<ul style="list-style-type: none"> The OLSP, contacted directly by the end-user or notified by the NNSP via their inter-company interface, sends a cancellation message to the ONSP, via their inter-company interface. The ONSP notifies the NPAC, via the SOA interface, indicating the porting request is to be canceled. The ONSP takes appropriate action related to internal work orders.
11. Did the provider requesting cancel send a Create message to NPAC?	<ul style="list-style-type: none"> This is the entry point from the Inter-Service Provider LNP Operations Flows – Conflict Flow, tie point C, Figure 8. This cancellation message is accepted by the NPAC only if the ONSP had previously created during the SV creation. If the ONSP does not send a create message to the NPAC for this SV, it cannot subsequently send a cancellation message. If yes, go to Step 13. If no, go to Step 12.
12. NPAC rejects the cancel request	<ul style="list-style-type: none"> NPAC sends an error via the SOA interface indicating that a cancel request cannot be sent for an SV that did not have a matching create from that SP.
13. Did both NNSP and ONSP send Create message to NPAC?	<ul style="list-style-type: none"> The NPAC tests for receipt of cancellation messages from the two SPs based on which SP had previously sent a message into the NPAC. Since the ONSP create is optional for SV creation, if the ONSP did not send a message during the creation process, the ONSP input during cancellation is not accepted by the NPAC. Similarly, if during the SV creation process only the ONSP sent a message, and not the NNSP, only the ONSP input is accepted when canceling an order. If yes, go to Step 15. If no, go to Step 14.
14. NPAC updates subscription to cancel, logs status change, and notifies NNSP and ONSP	<ul style="list-style-type: none"> For the notification process, refer to Inter-Service Provider LNP Operations Flows – Reseller Notification, Figure 5. For a “non-concurred” SV, when the first cancellation message is received, the NPAC sets the SV status directly to <i>cancel</i>, and proceeds to tie point Z. Both NNSP and ONSP are notified of this change in status via the SOA interface.

Inter-Service Provider LNP Operations Flows - Narratives

Flow Step	Description
15. NPAC updates subscription to cancel-pending, logs status change, and notifies NNSP and ONSP	<ul style="list-style-type: none"> For the notification process, refer to Inter-Service Provider LNP Operations Flows – Reseller Notification, Figure 5. For a “concurrent” SV, when the first cancellation message is received, the NPAC sets the SV status to <i>cancel-pending</i>. Both NNSP and ONSP are notified of this change in status via the SOA interface.
16. Did NNSP send cancel to NPAC?	<ul style="list-style-type: none"> If yes, go to Step 17. If no, go to Step 21.
17. Did NPAC receive cancel ACK from ONSP within first cancel window timer?	<ul style="list-style-type: none"> The NPAC applies a nine (9)-business hour [tunable parameter] time limit on receiving cancellation acknowledgment messages from both SPs. This is referred to as the Cancellation-Initial Concurrence Window. The ACK is optional for the SP that initiated the cancel request. NPAC timers include business hours only, except where otherwise specified. Short business hours are defined as 7a-7p CT (business day start at 13:00/12:00 GMT, duration of 12 hours). Long business hours are planned for 9a-9p in the predominant time zone for each NPAC region (business day start – NE/MA/SE 14:00/13:00 GMT, MW/SW/Canadian 15:00/14:00 GMT, WE 16:00/15:00 GMT, WC 17:00/16:00 GMT, duration of 12 hours). Short Business Days are currently defined as Monday through Friday, except holidays, and Long Business Days are currently defined as Sunday through Saturday (seven days a week), except holidays. Holidays and business hours are defined for each NPAC Region. If yes, go to Step 20. If no, go to Step 18.
18. NPAC notifies ONSP that cancel ACK is missing	<ul style="list-style-type: none"> The Cancellation-Initial Concurrence Window starts with receipt of the first cancellation message at NPAC. When this timer expires, the NPAC requests the missing information from ONSP via the SOA interface. Only “concurrent” subscriptions reach this point in the process flow.

Inter-Service Provider LNP Operations Flows - Narratives

Flow Step	Description
19. NPAC waits for either cancel ACK from ONSP or expiration of second cancel window timer	<ul style="list-style-type: none"> • The NPAC applies an additional nine (9) business hour [tunable parameter] time limit on receiving cancellation acknowledgment messages from both Service Providers. This is referred to as the Cancellation-Final Concurrence Window. The ACK is optional for the SP that initiated the cancel request. • NPAC SMS processing timers include business hours only, except where otherwise specified. Short business hours are defined as 7a-7p CST (business day start at 13:00 GMT, duration of 12 hours). Long business hours are planned for 9a-9p in the predominant time zone for each NPAC region (business day start – NE/MA/SE 8a-8p CST, MW/SW 9a-9p CST, WE 10a-10p CST, WC 11a-11p CST, duration of 12 hours). Short Business Days are currently defined as Monday through Friday, except holidays, and Long Business Days are currently defined as Sunday through Saturday (seven days a week), except holidays. Holidays and business hours are defined for each NPAC Region. • Either upon receipt of the concurring ACK notification or the expiration of the second cancel window timer, go to Step 20.
20. NPAC updates subscription to cancel, logs cancel and notifies NNSP and ONSP	<ul style="list-style-type: none"> • For the notification process, refer to Inter-Service Provider LNP Operations Flows – Reseller Notification, Figure 5. • The porting request is canceled by changing the subscription status to <i>canceled</i>. Both Service Providers are notified of the cancellation via the SOA interface.
21. Did NPAC receive cancel ACK from NNSP within first cancel window?	<ul style="list-style-type: none"> • The NPAC applies a nine (9)-business hour [tunable parameter] time limit on receiving cancellation acknowledgment messages from both SPs. This is referred to as the Cancellation-Initial Concurrence Window. The ACK is optional for the SP that initiated the cancel request. • NPAC timers include business hours only, except where otherwise specified. Short business hours are defined as 7a-7p CT (business day start at 13:00/12:00 GMT, duration of 12 hours). Long business hours are planned for 9a-9p in the predominant time zone for each NPAC region (business day start – NE/MA/SE 14:00/13:00 GMT, MW/SW/Canadian 15:00/14:00 GMT, WE 16:00/15:00 GMT, WC 17:00/16:00 GMT, duration of 12 hours). Short Business Days are currently defined as Monday through Friday, except holidays, and Long Business Days are currently defined as Sunday through Saturday (seven days a week), except holidays. Holidays and business hours are defined for each NPAC Region. • If yes, go to Step 20. • If no, go to Step 22.
22. NPAC notifies NNSP that cancel ACK is missing	<ul style="list-style-type: none"> • The Cancellation-Initial Concurrence Window starts with receipt of the first cancellation message at NPAC. When this timer expires, the NPAC requests the missing information from NNSP via the SOA interface. Only “concurrent” subscriptions reach this point in the process flow.

Inter-Service Provider LNP Operations Flows - Narratives

Flow Step	Description
23. Did NPAC receive cancel ACK from NNSP within second cancel window timer?	<ul style="list-style-type: none">• The NPAC applies an additional nine (9)-business hour [tunable parameter] time limit on receiving cancellation acknowledgment messages from both SPs. This is referred to as the Cancellation-Final Concurrence Window. The ACK is optional for the SP that initiated the cancel request.• NPAC timers include business hours only, except where otherwise specified. Short business hours are defined as 7a-7p CT (business day start at 13:00/12:00 GMT, duration of 12 hours). Long business hours are planned for 9a-9p in the predominant time zone for each NPAC region (business day start – NE/MA/SE 14:00/13:00 GMT, MW/SW/Canadian 15:00/14:00 GMT, WE 16:00/15:00 GMT, WC 17:00/16:00 GMT, duration of 12 hours). Short Business Days are currently defined as Monday through Friday, except holidays, and Long Business Days are currently defined as Sunday through Saturday (seven days a week), except holidays. Holidays and business hours are defined for each NPAC Region.• If yes, go to Step 20.• If no notification is received prior to second cancel window timer expiration, proceed to tie-point CC, “Cancellation Conflict Process Flow”, Figure 10.
Z. End	<ul style="list-style-type: none">• Return to main flow, tie point Z, Figure 1.

Cancellation Conflict Flow for Provisioning Process

Cancel-Conflict Flow due to missing Cancellation ACK from New SP,
Figure 10

Flow Step	Description
Note that the Cancellation Conflict process flow is reached only for “concurrent” subscriptions.	
1. NPAC updates subscription to conflict, logs conflict, and notifies NNSP and ONSP	<ul style="list-style-type: none"> This is the entry point from the Inter-Service Provider LNP Operations Flows – Cancellation Flow, tie point CC, Figure 9. If the NNSP does not provide a cancellation notification message to NPAC, in spite of a Cancellation LSR from the ONSP and a reminder message from NPAC, the subscription is placed in a <i>conflict</i> state. NPAC also writes the proper conflict cause code to the subscription record, and notifies both SPs, with proper conflict cause code, of the change in status via the SOA interface. For the notification process, refer to Inter-Service Provider LNP Operations Flows – Reseller Notification, Figure 5. Both SPs take appropriate action related to internal work orders.
2. Did NPAC receive cancel message from NNSP?	<ul style="list-style-type: none"> Only “missing cancellation ACK from New SP” subscriptions reach this point in the process flow. The subscription will transition to pending or cancel. With the subscription in <i>conflict</i>, it is only the NNSP who controls the transaction. The NNSP makes a concerted effort to contact the ONSP prior to proceeding. If yes, go to Step 3. If no, go to Step 5.
3. NNSP notifies NPAC to cancel subscription	<ul style="list-style-type: none"> The NNSP may decide to cancel the subscription. If so, they notify NPAC of this decision via the SOA interface.
4. NPAC updates subscription to cancel, logs cancel, and notifies NNSP and ONSP	<ul style="list-style-type: none"> Following notification by the NNSP to cancel the subscription, NPAC logs this information, and changes the subscription status to <i>canceled</i>. Both SPs are notified of the change in the subscription status via the SOA interface. For the notification process, refer to Inter-Service Provider LNP Operations Flows – Reseller Notification, Figure 5. Both SPs take appropriate action related to internal work orders.
5. Has conflict expiration window expired?	<ul style="list-style-type: none"> At this point in the process flow, the subscription status is <i>conflict</i>, and is awaiting conflict resolution or the expiration of the tunable window (Conflict Expiration Window, current value of 30 days). If yes, go to Step 6. If no, go to Step 7.

Inter-Service Provider LNP Operations Flows - Narratives

Flow Step	Description
6. NPAC updates subscription to cancel, logs cancel, and notifies NNSP and ONSP	<ul style="list-style-type: none"> After no response from the NNSP for 30 calendar days regarding this particular subscription, NPAC changes the status to <i>canceled</i> and notifies both SPs of the change in status via the SOA interface. For the notification process, refer to Inter-Service Provider LNP Operations Flows – Reseller Notification, Figure 5. Both SPs take appropriate action related to internal work orders.
7. Did NPAC receive resolve conflict message from NNSP	<ul style="list-style-type: none"> The NNSP may choose to proceed with the porting process, in spite of a cancellation message from the ONSP. As both SPs are presumably basing their actions on the end-user's request, and each is apparently getting a different request from that end-user, each should ensure the accuracy of the request. If the NNSP decides to proceed with the porting, they send a resolved conflict message via the SOA interface. It is the responsibility of the NNSP to contact the ONSP, to request that related work orders which support the porting process are performed. The ONSP must support the porting process. If yes, go to Step 8. If no, return to Step 2.
8. Has NNSP conflict resolution restriction expired?	<ul style="list-style-type: none"> At this point in the process flow, the subscription status is <i>conflict</i>, and is awaiting conflict resolution or the expiration of the tunable window (current values of six hours for wireline [Long Conflict Resolution New Service Provider Restriction], and six hours for wireless [Short Conflict Resolution New Service Provider Restriction]). The conflict resolution restriction window is only applicable the first time a subscription is placed into conflict, whether the conflict is invoked by the NPAC due to this process, or placed into conflict by the ONSP. If yes, go to Step 9. If no, go to Step 10.
9. NPAC notifies NNSP and ONSP of 'conflict off' via SOA	<ul style="list-style-type: none"> For the notification process, refer to Inter-Service Provider LNP Operations Flows – Reseller Notification, Figure 5. NPAC notifies both SPs of the change in subscription status. The porting process resumes as normal, at tie-point BB, Figure 1.
10. NPAC rejects the resolve conflict request from NNSP	<ul style="list-style-type: none"> The NNSP has sent the resolve conflict message before the expiration of the conflict resolution restriction window. NPAC returns an error message back via the SOA interface.
Z. End	<ul style="list-style-type: none"> Return to main flow, tie point Z, Figure 1.

Disconnect Process for Ported TN(s)

Disconnect Flow, Figure 11

Flow Step	Description
1. End-user initiates disconnect	<ul style="list-style-type: none"> The end-user provides disconnect date and negotiates intercept treatment with current SP.
2. Is NLSP a Reseller?	<ul style="list-style-type: none"> If yes, go to Step 3. If no, go to Step 4.
3. NLSP sends disconnect request to NNSP	<ul style="list-style-type: none"> Current Local SP sends disconnect request to current Network SP, per inter-company processes.
4. NNSP initiates disconnect	<ul style="list-style-type: none"> NNSP initiates disconnect of service based on request from NLSP or end-user. NNSP initiates disconnect of service based on regulatory authority(s).
5. NNSP arranges intercept treatment when applicable	<ul style="list-style-type: none"> NNSP arranges intercept treatment as negotiated with the end user, or, when the disconnect is SP initiated, per internal processes.
6. NNSP creates and processes service order	<ul style="list-style-type: none"> NNSP follows existing internal process flows to ensure the disconnect within its own systems.
7. NNSP notifies NPAC of disconnect date ¹ and indicates effective release date ²	<ul style="list-style-type: none"> NNSP notifies NPAC of disconnect date via the SOA interface and indicates effective release date, which defines when the broadcast occurs. If no effective release date is given, the broadcast from the NPAC is immediate. The maximum interval between disconnect date and effective release date is 18 months.
8. Has effective release date been reached?	<ul style="list-style-type: none"> If yes, go to Step 9. If no, repeat Step 8.
9. NPAC broadcasts subscription deletion to all applicable SPs	<ul style="list-style-type: none"> On effective release date, the NPAC broadcasts SV deletion to all applicable SPs via the LSMS interface.
10. NPAC notifies code/block holder of disconnected TN(s) disconnect and release dates	<ul style="list-style-type: none"> On effective release date, the NPAC notifies code/block holder of the disconnected TN(s), effective release and disconnect dates via the SOA interface.

¹ Disconnect Date: Date the telephone number or numbers are no longer associated between an end user and the current Service Provider.

² Effective Release Date: Date the telephone number reverts back to NPA/NXX holder/owner.

Inter-Service Provider LNP Operations Flows - Narratives

Flow Step	Description
11. NPAC deletes TN(s) from active database	<ul style="list-style-type: none">On effective release date, the NPAC removes telephone number from NPAC database.
12. End	

¹ Disconnect Date: Date the telephone number or numbers are no longer associated between an end user and the current Service Provider.

² Effective Release Date: Date the telephone number reverts back to NPA/NXX holder/owner.

Audit Process

Audit Flow, Figure12

Flow Step	Description
1. Service Provider requests an audit from NPAC	<ul style="list-style-type: none">• An SP may request an audit to assist in resolution of a repair problem reported by an end-user. Prior to the audit request, the SP completes internal analysis as defined by company procedures and, if another SP is involved, attempts to jointly resolve the trouble in accordance with inter-company agreements between the involved service providers. Failing to resolve the trouble following these activities, the SP requests an audit.
2. NPAC issues queries to appropriate LSMSs	<ul style="list-style-type: none">• The NPAC issues queries to the LSMSs involved in the customer port.
3. NPAC compares own subscription version to LSMS subscription version	<ul style="list-style-type: none">• Upon receipt of the LSMS subscription version, the comparison of the NPAC and LSMS subscription versions is made to determine if there are discrepancies between the two databases.• If an LSMS does not respond, it is excluded from the audit.
4. NPAC downloads updates to LSMSs with subscription version differences	<ul style="list-style-type: none">• If inaccurate routing data is found, the NPAC broadcasts the correct subscription version data to any involved SPs networks to correct inaccuracies.
5. Are all audits completed?	<ul style="list-style-type: none">• If yes, go to Step 6.• If no, return to Step 4.
6. NPAC reports audit completion and discrepancies to requestor	<ul style="list-style-type: none">• The NPAC reports to the requesting SP following completion of the audit to allow the SP to close the trouble ticket.• Upon request, the NPAC provides ad hoc reports to SPs that wish to determine which SPs are launching audit queries to their LSMS.
7. End	

Code Opening Processes

NPA-NXX Code Opening, Figure 13

<u>Flow Step</u>	<u>Description</u>
1. NPA-NXX holder notifies NPAC of NPA-NXX Code(s) being opened for porting	<ul style="list-style-type: none">• The SP responsible for the NPA-NXX being opened must notify the NPAC via the SOA or LSMS interface within a regionally agreed upon time frame.• In the case of numbers that use a Type 1 wireless interconnection, the corresponding NPA-NXX needs to be opened by the Old Wireline SP.
2. NPAC updates its NPA-NXX database	<ul style="list-style-type: none">• The NPAC updates its databases to indicate that the NPA-NXX has been opened for porting.
3. NPAC sends notice of code opening to all SPs	<ul style="list-style-type: none">• The NPAC provides advance notice via the object creation message of the scheduled opening of NPA-NXX code(s) via the SOA and LSMS interface. Currently the NPAC vendor is also posting the NPA-NXX openings to the secure website.
4. End	

Code Opening Processes

First TN Ported in NPA-NXX, Figure 14

Flow Step	Description
1. NPAC successfully processes create request for TN subscription version	<ul style="list-style-type: none">• SP notifies the NPAC of SV creation for a TN in an NPA-NXX.
2. NPAC successfully processes create request for NPA-NXX-X	<ul style="list-style-type: none">• NPAC successfully processes an NPA-NXX-X for a Number Pool Block.
3. First SV activity in NPA-NXX?	<ul style="list-style-type: none">• If yes, go to Step 4.• If no, go to Step 5.
4. NPAC sends notification of first TN ported to all SPs via SOA and LSMS	<ul style="list-style-type: none">• When the NPAC receives the first SV create request in an NPA-NXX, it will broadcast a “heads-up” notification to all SPs via the SOA and LSMS interfaces. Upon receipt of the NPAC message, all SPs, within five (5) business days, will complete the opening for the NPA-NXX code for porting in all switches.
5. End	

Cancel-Pending Undo Process for Ported TN(s)

Cancel-Undo Flow, Figure 15

Flow Step	Description
1. Service Provider requests a cancel-undo	<ul style="list-style-type: none">• The Cancel-Pending Undo Process may begin with a Service Provider requesting the reversal (undo) of an in-progress cancel for their cancel-pending port.
2. Is the subscription in cancel-pending status?	<ul style="list-style-type: none">• If yes, go to Step 4.• If no, go to Step 3.
3. NPAC rejects the cancel-undo request	<ul style="list-style-type: none">• NPAC sends an error to the requesting SP indicating the current SV status is not valid for a cancel-undo request.
4. Did the provider requesting a cancel-undo issue a cancel for this subscription?	<ul style="list-style-type: none">• If yes, go to Step 5.• If no, repeat Step 3.
5. Notify Reseller – NPAC updates subscription to status prior to cancel and notifies NNSP and ONSP	<ul style="list-style-type: none">• Upon cancel-undo, NPAC logs this information, and changes the subscription status to the status prior to the cancel (either <i>pending</i> or <i>conflict</i>). Both SPs are notified of the change in the subscription status via the SOA interface.• For the notification process, refer to Inter-Service Provider LNP Operations Flows – Reseller Notification, Figure 5.• Both SPs take appropriate action related to internal work orders.
6. End	

Inter-Service Provider LNP Operations Flows - Narratives

Tunable Name	Current Tunable Value
T1, Short Initial Concurrence Window	1 hour
T1, Long Initial Concurrence Window	9 hours
T2, Short Final Concurrence Window	1 hour
T2, Long Final Concurrence Window	9 hours
Conflict Restriction Window	12:00pm (noon)
Conflict Expiration Window	30 days
Long Conflict Resolution New Service Provider Restriction	6 hours
Short Conflict Resolution New Service Provider Restriction	6 hours
Long Cancellation-Initial Concurrence Window	9 hours
Short Cancellation-Initial Concurrence Window	9 hours
Long Cancellation-Final Concurrence Window	9 hours
Short Cancellation-Final Concurrence Window	9 hours